

(19) World Intellectual Property
Organization
International Bureau



Rec'd PCT/PTO

532,004
19 APR 2005

(43) International Publication Date
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number
WO 2004/038053 A2

(51) International Patent Classification⁷: C22C 18/00,
C23C 2/06

(21) International Application Number:
PCT/JP2003/013511

(22) International Filing Date: 23 October 2003 (23.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2002-309549 24 October 2002 (24.10.2002) JP

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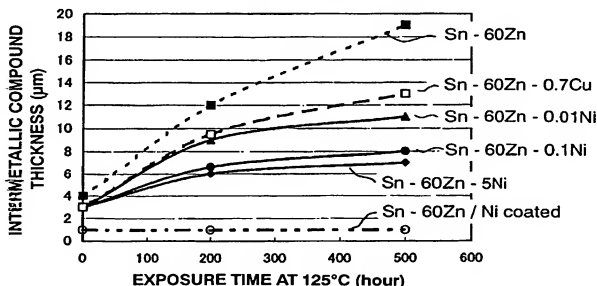
(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: A LEAD-FREE SOLDER, AND A LEAD-FREE JOINT

INTERMETALLIC COMPOUND GROWTH



(57) Abstract: A solder not containing lead (a lead-free solder) contains zinc and tin, and also contains 5 weight percent or less nickel and 0.5 weight percent or less aluminum with a liquid phase temperature of 260 degrees C or greater. In addition, a lead-free solder has a liquid phase temperature of 260 degrees C or greater, and contains 30 to 70 weight percent zinc, 5 weight percent or less nickel, and the remaining weight percent tin. Moreover, a joint is manufactured using these lead-free solders. As a result, a lead-free solder and a lead-free joint having excellent electrical characteristics but not including harmful substances, can be provided.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

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